Schedule B
to the Response the Office Action of October 6, 2006

Please amend the pre-existing paragraphs of the specification to read as follows:

[0016] Therefore, in view of the foregoing, what is needed is tubular baseball bats with variable stiffness along their barrel portions. A main object of the present invention is to provide tubular baseball, and particularly existing bats, with changed (usually decreased) bat performance, without significantly increased weight, in order to meet new or changed performance standards. To achieve this, the bats of the present invention are stiffened in the barrel area of peak bat performance commonly referred to as the sweetspot. Typically, this is an area approximately 2" to 4" in width as compared to barrel portion lengths of 4" to 16". This is achieved **in one variant** by inserting or adding to the bat a circumferential ~~**stiffner**~~ **stiffener** in the region of the sweetspot.

[0020] A fourth object of the present invention is to provide newly designed tubular all polymer composite baseball bats with a predetermined bat performance with larger sweetspot areas than bats of the prior art. In the present invention this is accomplished by graduating the radial stiffness of the barrel portion along the entire barrel length. Specifically, the peak performance area (generally the sweetspot area) is designed to have the highest radial stiffness while the area of the barrel portion nearest the taper and barrel ends have the lowest radial stiffness and with the barrel portion between the sweetspot and barrel ends being graduated. The resultant effect is a sweetspot area that runs substantially full length of the barrel portion. In the present invention this **[[is]]** **can be** accomplished by engineered selection of the composite fiber type(s), fiber sizes(s), fiber angles(s), and the total composite multi-layered laminate or structure having graduated radial stiffness along the barrel portion length.

Please amend the paragraphs of the specification to ensure addition of the following previously presented paragraphs:

[0036A] Fig. 6.1 shows a longitudinal cross-section of the third embodiment of the present invention showing a single wall polymer composite tubular bat in accordance with the present invention with an alternative construction showing a thickened barrel wall 21 resulting in increased radial stiffness generally confined to the sweetspot area of the barrel portion.

[0036B] Fig. 6.1A shows a cross-sectional area at a barrel location not within the sweetspot area.

[0036C] Fig. 6.1B shows a cross-sectional area within the sweetspot area showing a stiffened area with thicker barrel wall.

[0036D] Fig. 6.2 shows a longitudinal cross-section of the third embodiment of the present invention showing an alternative double wall polymer composite bat in accordance with the present invention showing a localized area of the fibre type and/or fibre angle change within the insert resulting in increased radial stiffness generally confined to the sweetspot area of the barrel portion.

[0036E] Fig. 6.2A shows a cross-sectional area at a barrel location not within the sweetspot area.

[0036F] Fig. 6.2B shows a cross-sectional area within the sweetspot area showing a stiffened area of changed fibre angles and/or type.

[0036G] Fig. 6.3 shows a longitudinal cross-section of the third embodiment of the present invention showing the alternative double wall polymer composite bat in accordance with the present invention with an alternative construction showing a thickened barrel wall 21 within the insert resulting in increased radial stiffness generally confirmed to the sweetspot areas of the barrel portion.

[0036H] Fig. 6.3A shows a cross-sectional area of a barrel location not within the sweetspot area.

[0036I] Fig. 6.3B shows a cross-sectional area within the sweetspot area showing a stiffened area with thicker barrel wall.

Please amend the pre-existing paragraphs of the specification to read as follows:

[0053] Other materials commonly used in bat constructions such as aluminum, wood and plastics are not anistropic and are thus limited in controlling bat performance; for example, radial stiffness is equal to longitudinal stiffness and cannot be graduated along the barrel length 1. However, with composite materials, which are preferred, properties of bats made in accordance with the present invention, such as radial stiffness which determines bat performance can be controlled (i.e. designed to a given requirement) by altering such parameters as the fiber alignments along the bat length 1, and/or the type of fibers chosen, their dernier (e.g. fiber stiffness) or **fiber** layout density **(i.e. higher percentage of fibers)** and/or the thickness of the polymer composite structure. Such thickened polymer composite material is integrally formed with the barrel wall portion whereby the thickened portion is formed of the same **polymeric** material as the underlying barrel wall portion without there being present a boundary therebetween ~~whereat different materials are in contact with each other~~.

[0062] The thin polymer composite stiffener 18 of the present invention has a stiffener wall which is typically in the order of .005 inches to .040 inches in thickness, with a length of 2 inches to 6 inches which is typically less than 50% of the barrel length, such as 16 2/3 % of the barrel length, as is apparent from Figure 10. A 4 inch stiffener, as referenced in paragraph [0059], in a 12 inch barrel as referenced in Figure 10, would represent 33.3% of the barrel length; a 4 inch stiffener in a 16 inch barrel would represent 25%, and a 2 inch stiffener in a 16 inch barrel would represent 12.5% of the barrel length. The stiffener 18 is preferably bonded, fully or partially, to the main member 16, or to the secondary member insert 13 of Fig. 7 or to the secondary member sleeve 14 of Fig. 8, or combinations thereof on either the internal or external barrel walls, as shown in Figures 4, 5, 7 and 8. Analogous to Figures 4, 5, 7 and 8 an alternative solution (since stiffness is proportional to thickness) to the stiffener 18 is to vary the barrel thickness 6 to the same extent and manner along the barrel length 1 of any bat according to the invention, including the bat of Figure 6, in order to vary bat performance. The barrel portion's effective wall thickness in the mid-section can be greater by **5%** **[[8 1/3]]** or more over the thickness of the barrel in the lateral, adjacent portions. Conversely, the barrel wall's thickness beyond its central portion, in the lateral regions proceeding towards the end portions of the barrel, may be at least **5%** **[[8 1/3]]** thinner than the thickness of the barrel wall in the mid-section. ~~Just as the stiffener wall may be typically in the order of .005 inches to .040 inches in thickness, or .010 inches to .040 inches in thickness, or~~

~~.015 inches to .040 inches in thickness, or 0.015 inches to 0.030 inches, so too the analogous increase in barrel wall thickness along the mid-section may fall within the same ranges.~~